WHAT IS CLAIMED IS:

1. A method for creating a highly connected network of nodes indicative of computer-readable data, including the steps of:

5   capturing data contained in at least one legacy database; and

structuring the captured data as a set of linked nodes, wherein each of the nodes includes at least one link to another one of the nodes, and the set of
10   linked nodes is structured such that when one of the nodes is designated as a point of view, representations of the nodes can be displayed as a sea of node representations.

2. The method of claim 1, also including the
15   steps of:

designating one of the nodes as the point of view; and

displaying said representations of the nodes as said sea of node representations, viewed from said
20   point of view.

3. The method of claim 1, also including the step of implementing a query, said step of implementing the query including the steps of:

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(a) establishing a first point of view and displaying said representations of the nodes as a first sea of node representations whose point of view is said first point of view;

(b) invoking a command which determines the query; and

(c) in response to the command, displaying a changed sea of node representations which emphasizes information having greater relevance to the query and deemphasizes information having less relevance to the query.

4. The method of claim 3, wherein step (c) is performed in a manner that is tolerant to imprecision and errors in the query.

5. The method of claim 3, wherein the command specifies key words, and step (c) is performed in such a manner that the changed sea of node representations facilitates access to relevant data containing none of the key words.

6. The method of claim 3, wherein step (c) is performed in such a manner that the changed sea of node representations facilitates finding of data that is similar to known data, without specifying

characteristics of said data that is similar to known
data.

7. The method of claim 3, wherein step (c)
includes the step of displaying a smoothly changing
sea of node representations which changes from the
first sea of node representations to the changed sea
of node representations with smooth changes in visual
state, so as to provide information to a user
regarding speed at which displayed node
representations change and regarding which parameters
of displayed node representations change.

8. The method of claim 2, wherein said sea of
node representations includes virtual reality
renderings.

9. The method of claim 1, wherein the nodes have
identical structure but at least some of the nodes
have different content.

10. A method for interactively exploring,
accessing, and visualizing information in a highly
connected network of nodes, said method including the
steps of:

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determining a set of linked nodes, each of the nodes including at least one link to another one of the nodes, wherein the set of linked nodes is structured such that representations of the nodes can be displayed as a sea of node representations; and

designating one of the nodes as a point of view, linking a number of the nodes directly to the point of view, and calculating individual link distances from each of at least some of the nodes to the point of view, thereby determining a hierarchical network of the nodes which is amenable to visualization.

11. The method of claim 10, wherein there are cyclic loops in linkages between at least some of the nodes directly and the point of view.

12. The method of claim 10, also including the step of:

adding or deleting at least one link of at least one of the nodes, thereby changing the hierarchical network.

13. The method of claim 10, also including the step of:

displaying representations of the nodes as a sea
of node representations, viewed from said point of
view.

14. The method of claim 10, wherein the
hierarchical network of the nodes determines a
connection strength of each of a set of linkages
between at least some of the nodes, and a magnitude
of each of at least some of the nodes, and wherein
position and size of each of the nodes in said
visualization is determined in accordance with each
said connection strength and magnitude.

15. The method of claim 10, wherein said sea of
node representations includes virtual reality
renderings.

16. The method of claim 10, wherein each of the
nodes has a node type, each of said link distances is
determined by a function of the number of links
between a pair of the nodes and the node type of each
node of said pair, and the hierarchical network has a
hierarchical tree structure.

17. The method of claim 10, also including the
step of:

implementing a user interface which displays representations of at least some of the nodes, wherein the user interface allows emulation of application programs by linking appropriate ones of the nodes.

18. The method of claim 10, also including the step of:

implementing a user interface which displays representations of at least some of the nodes, wherein the user interface implements a simple command and query syntax which is amenable to a voice interface.

19. A method, including the steps of:

structuring computer-readable data as a set of linked nodes, wherein each of the nodes includes at least one link to another one of the nodes, each of the nodes has a name associated therewith, and the set of linked nodes is structured such that when one of the nodes is designated as a point of view, representations of the nodes can be displayed as a sea of node representations; and

maintaining information specific to each of the nodes, including by maintaining the name of each of the nodes such that each said name is searchable and retrievable.

20. The method of claim 19, wherein the information specific to each of the nodes, includes a magnitude and connection strength of a link between said each of the nodes and at least one other one of the nodes.

21. A method for associating nodes of a set of linked nodes, wherein each of the nodes contains computer-readable data, at least one link to another one of the nodes, and a link identification for each event which links said each of the nodes to another one of the node, and wherein the set of linked nodes is structured such that when one of the nodes is designated as a point of view, representations of the nodes can be displayed as a sea of node representations, said method including the steps of:

storing, in an abstract node, a meaningful context common to a set of the nodes, wherein the abstract node is linked to each of the nodes in the set; and

sharing a single link identification among the nodes in said set, thereby associating the links that are identified by said single link identification.

22. The method of claim 21, also including the step of modulating a connection strength of the links that are identified by said single link

identification, thereby sensitizing or desensitizing said links to further operations.

23. A method of establishing a set of linked nodes from text data, wherein each of the nodes includes at least one link to another one of the nodes, and the set of linked nodes is structured such that when one of the nodes is designated as a point of view, representations of the nodes can be displayed as a sea of node representations, said method including the steps of:

creating a full-text-node containing the text data;

discard selected words from the text data, thereby determining a set of remaining text, and creating a node for each word of the remaining text;

linking the full-text-node to each node representing one said word of the remaining text.

24. A method of establishing a set of linked nodes from data organized in rows and columns with column headings, wherein each of the nodes includes at least one link to another one of the nodes, and the set of linked nodes is structured such that when one of the nodes is designated as a point of view, representations of the nodes can be displayed as a

sea of node representations, said method including the steps of:

representing each of the column headings by an abstract node;

representing each cell of the data by a data node;

establishing links between each said abstract node and each said data node that corresponds to a cell in a column whose column heading is represented by said abstract node; and

establishing links between each said data node that corresponds to a cell in one of the rows.

25. A method of establishing a set of linked nodes from files linked by HTML references, wherein each of the nodes includes at least one link to another one of the nodes, and the set of linked nodes is structured such that when one of the nodes is designated as a point of view, representations of the nodes can be displayed as a sea of node representations, said method including the steps of:

establishing data nodes, each of the data nodes representing each of the files;

establishing links from said data nodes to terms found in the files.

26. The method of claim 25, wherein each of the terms is one of a set of selected tag values such as meta-tags or heading values.

27. The method of claim 25, also including the step of:

establishing links to abstract nodes representing suffixes of the files.

28. A method of establishing a set of linked nodes from files from computer file system, wherein each of the nodes includes at least one link to another one of the nodes, and the set of linked nodes is structured such that when one of the nodes is designated as a point of view, representations of the nodes can be displayed as a sea of node representations, said method including the steps of:

establishing links between data nodes representing a file directory and data nodes representing files or sub-directories in the file directory.

29. A method for retrieving data of interest from a network of linked nodes, wherein each of the nodes includes data and at least one link to another one of the nodes, and the set of linked nodes is

structured such that when one of the nodes is designated as a point of view, representations of the nodes can be displayed as a sea of node representations, said method including the steps of:

5   (a) establishing a first point of view and displaying said representations of the nodes as a first sea of node representations whose point of view is said first point of view;

      (b) invoking a command which determines a query;
10   and

      (c) in response to the command, displaying a changed sea of node representations which emphasizes information having greater relevance to the query and deemphasizes information having less relevance to the
15   query.

      30. The method of claim 29, wherein step (c) includes the step of:

      tracing backwards from a target node to the first point of view by following all links from the
20   target node to intermediate nodes having lesser magnitude, and displaying representations of said intermediate nodes.

      31. The method of claim 29, wherein each of the node representations is displayed in a position that

depends on parameter values of the corresponding node, and wherein step (c) includes the step of:

gradually changing the displayed position of at least one of the node representations, thereby showing a transition between an initial state and a final state of said one of the node representations.

32. The method of claim 31, wherein step (c) includes the step of:

operating on parameters indicative of pushing or pulling of the displayed position of said at least one of the node representations relative to displayed positions of others of the node representations.

33. The method of claim 29, wherein step (c) includes the step of:

traveling distally and upstream from a target node, finding the first abstract node linked to the target node and emphasizing a displayed representation of said first abstract node, thereby abstracting the target node.

34. The method of claim 33, wherein step (c) also includes the step of:

abstracting the target node at a higher level, by traveling from said first abstract node to directly linked abstract nodes which are both distal to and upstream of said first abstract node.

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35. The method of claim 29, wherein step (c) includes the step of:

emphasizing displayed representations of abstract nodes linked to a target node which have not been recently visited by a query operation.

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36. The method of claim 29, wherein step (c) includes the step of:

magnifying displayed representations of nodes based on similarity of each of the nodes to a chosen node, by magnifying displayed representations of data

15 nodes linked to at least some of a set of abstract nodes linked to the chosen node.

37. The method of claim 29, wherein step (c) includes the step of:

modifying a potentiation parameter of at least

20 one of the nodes.

38. A method of displaying node representations indicative of a network of linked nodes, wherein each of the nodes includes data and at least one link to another one of the nodes, and the set of linked nodes is structured such that when one of the nodes is designated as a point of view, representations of the nodes can be displayed as a sea of node representations, said method including the steps of:

designating one of the nodes as the point of view; and

displaying said representations of the nodes as said sea of node representations, viewed from said point of view, with visual emphasis assigned to each of the node representations dependent on parameters of each of the nodes, said parameters including connection strength of a link between said each of the nodes and at least one other one of the nodes.

39. The method of claim 38, wherein said parameters also include polarization of the link between said each of the nodes and at least one other one of the nodes.

40. The method of claim 38, wherein said parameters also include the minimum number of links between said each of the nodes and at least one other one of the nodes.